

### ABSTRACT

A hybrid software/hardware packet filter in which rule  
5 compiling means creates a rule table, assembles packet  
acceptance rules, and outputs the acceptance rules to a  
configurable hardware circuit to create hardware circuits  
representing the acceptance rules and applying the  
acceptance rules to the packet and outputting a single bit  
10 for each rule indicating whether the packet matched the  
rule. Linking means receives the match bit vector and  
links each bit in the match bit vector with the  
corresponding entry in the rule table and directs the  
packet to a destination determined by the rule table.